

*Elaboration strategies*

*Elaboration strategies* involve students forming a mental image of a concept by establishing a common link to information already known. Students describing new information in their own words and explaining the materials to someone else are examples of elaboration strategies.

*Organisational strategies*

*Organisational strategies* help students develop their own processes for organising information. A typical example would be to have students develop a diagram that shows relationships (such as a flow chart, knowledge or mind map), and developing a summary of materials.

*Checking for understanding*

In addition to completing set questions at the end of a task, students can be taught to self-question as they work through materials, ask questions of other students and/or write daily summaries.

## Summary: Instructional factors that facilitate effective learning

Discussion in this section has highlighted the centrality of the teacher's role in managing the instructional processes of the classroom to optimise students' skill mastery and knowledge. A learning environment must be created that is supportive of students' individual learning needs and that recognises the emotional and affective aspects of learning. The teacher's role is one of guiding the learning process to ensure that as students progress through the different stages of learning, attention to task is maintained, confusion and errors are minimised, and success is maximised. Through the careful presentation of guided and independent practice, students are able to achieve the mastery and automaticity of response that is required for them to proceed with new learning.

Teachers can assist learning by presenting materials that help focus attention, enhance memory processing and motivate students to learn. They can offer content-enhancement strategies and teach actual learning strategies. In this way, students can gain increased control over the learning situation and obtain ongoing benefits from their resulting success. In Box 5.2, we illustrate ways in which all of the elements of great teaching that we have discussed have recently been highlighted in educational systems around Australia.

At the end of this chapter, in *Activities*, you are encouraged to find similar policies and processes in the educational system in your state or territory, and reflect on the principles and strategies you identify in light of the material you have reviewed in this chapter. You may also like to set yourself some professional development goals in light of your teaching experiences and training.

In this section we have focused specifically on structuring individual lessons, and in Box 5.2 we have noted that recent Quality Teaching initiatives in Australian educational systems have provided a sharp focus to the pivotal role of pedagogy in maximising student learning outcomes. In the next section we discuss instructional processes that integrate academic achievement with specific behavioural and social dimensions, highlighting the complex interrelationship that exists between appropriate social behaviour and active engagement in learning.

**BOX 5.2**

### QUALITY TEACHING IN ACTION IN AUSTRALIAN SCHOOLS AND CLASSROOMS

In 2003, the NSW Department of Education and Training (DET) issued a Discussion paper titled *Quality teaching in NSW public schools*. Developed by Professors Jennifer Gore and James Ladwig of the University of Newcastle in partnership with the NSW DET, this paper stimulated a large-scale professional development process for NSW teachers and school communities that is both ongoing and regenerative. On page 4 of the paper it is noted that 'the term *pedagogy* recognises that how one teaches is inseparable from what one teaches, from what and how one assesses and from how one learns' (NSW DET, 2003a, 4).

Influenced by reform experiences in Queensland (Gore et al., 2001) and overseas (Newmann et al., 1996), the Quality Teaching initiative in NSW highlights the vital role teachers play in assisting students to maximise learning outcomes. The model focuses on three dimensions: **Intellectual quality**, a **Quality learning environment**, and **Significant work**. Pedagogy that extends the cognitive engagement of students, in learning environments that are positive and appropriate to identified needs, and that focuses attention on the uses and significance of their learning, will maximise student learning outcomes.

Although it is not the intention here to restate all of the details of this model, two points are clear. First, the Quality Teaching dimensions are consistent with and strongly based on the extensive educational research into effective teaching that has taken place over the last few decades. Second, there is heavy emphasis on the professional ability of teachers to reflect on their practices and adapt to the diverse needs of the students in their classrooms. As you explore the concepts of Quality Teaching (see additional readings at the end of this chapter), consider how they articulate with the ecological model and draw attention to the importance of the reflective practitioner and action research methodology discussed in Chapter 3 of this book.

## Integrated approaches encouraging academic and social adjustment

Discussion in this chapter has focused on the importance of establishing classrooms with a positive approach to learning and behaviour attained through careful attention to high-quality curriculum and instruction. The teacher's role is to establish within the classroom those teaching and learning practices that will most effectively address the academic and social needs of all students.

Success in learning, motivation, self-efficacy, self-esteem and the ability to relate to peers were highlighted as the features that promote positive behaviour in the classroom, achieved by quality instruction and the provision of relevant curriculum. We now discuss the instructional methodologies of mastery learning, cooperative learning, peer tutoring and other peer-mediated approaches, in terms of their contributions to the development of a positive self-concept, success in the learning situation, the establishment of intrinsic motivational control and the ability to get along with peers.

## Mastery learning

*Mastery learning* is a process for the organisation of variable groupings within the classroom based on the goals students are targeting individually for mastery. Mastery learning, based on the original work of Bloom (1976), follows a cycle of teaching, testing, reteaching and retesting. Students who are able to demonstrate mastery of the required skills or concepts move on to the next unit or complete enrichment activities related to the same topic. Students who have not demonstrated mastery following initial teaching and practice are provided with additional time and assistance until mastery is achieved.

Essential features of mastery learning include careful sequencing of the program into units of work, clearly specified learning objectives and mastery criteria for each unit, assessment tasks related to each unit, provision of feedback to students on their progress, and additional time and corrective instruction if necessary to ensure demonstrated mastery of the content (Cole & Chan, 1994). Mastery learning enables all the qualities of effective instruction to be addressed, including:

- presentation of tasks in small, achievable steps necessary to achieve mastery
- mastery measured in terms of specific learning objectives
- active engagement by students in the process of learning, with success serving to reinforce students for the effort they put into learning
- allocation of time needed by individuals to master the learning process and demonstrate skill acquisition
- careful monitoring of the learning process with feedback about progress provided
- assistance in learning provided when students require it most.

The potential outcomes of mastery learning are positive in terms of learning, self-esteem and motivation. Students gain confidence in their ability to learn when they experience success. In addition, it has been found that mastery of earlier skills and concepts assists further learning so that students are motivated to continue interacting with material when they are experiencing success. The development of self-esteem as a result of successful learning on an individual level promotes positive social relationships at other times in the classroom. The mastery-learning process has been found to be particularly effective for low-achieving students in ensuring the learning of basic skills and in promoting a positive self-image in such students. Care needs to be taken, however, to ensure that high-achieving students receive appropriate enrichment activities so that their learning needs are also met (Good & Brophy, 2000).

The mastery-learning model is promoted as a means of adjusting whole-class pacing to allow all students time to master curriculum objectives. The result is an increased percentage of students who master basic objectives, and related enhanced motivation and reduction in the inappropriate behaviour that would normally accompany student failure (Good & Brophy, 2000). The mastery-learning approach is most suitable for curriculum areas that deal with the learning of basic facts and in subjects where content is hierarchical in nature. It is not necessarily suitable for areas that require the expression of attitudes or values, or that demand creativity or problem solving. Mastery learning is only one method of managing instruction and should be used in conjunction with other approaches.

That advanced learners appear to be held back is frequently a concern expressed with regard to mastery-learning approaches. Good and Brophy (2000) recommend identifying the most essential

objectives within a set topic that all students need to master, with enrichment opportunities for students to work on once these objectives have been achieved. The three-level pyramid process of planning (Dyck et al., 1997; Schumm et al., 1994) discussed earlier in this chapter is one such means to meet diverse learning needs and maintain a focus on the mastery of individual objectives that are relevant and challenging to all students in the class (the model presented by Conway, 2005b, is also recommended).

Figure 5.2 represents the sequence followed in organising instruction according to the principles of mastery learning. We now explain each step to provide a guide to establishing mastery learning in the classroom.

### Establishing instructional objectives

An important starting point when using mastery learning is to carefully identify *instructional objectives*, including the criteria under which mastery will be accomplished. Instructional objectives are presented to students prior to the commencement of a unit of work.

### Pre-assessment

After the instructional objective is presented, students are required to complete a *pre-assessment* activity. This consists of a sample of the required skill, to identify those students who do not have the prerequisite skills to begin the task and who need to be relocated to a more appropriate level. This, for example, could include working on single-digit additions to ten, or one-to-one correspondence. Additionally it could mean the provision of enrichment activities for students who demonstrate mastery, with a concurrent introduction to the next level of complexity.

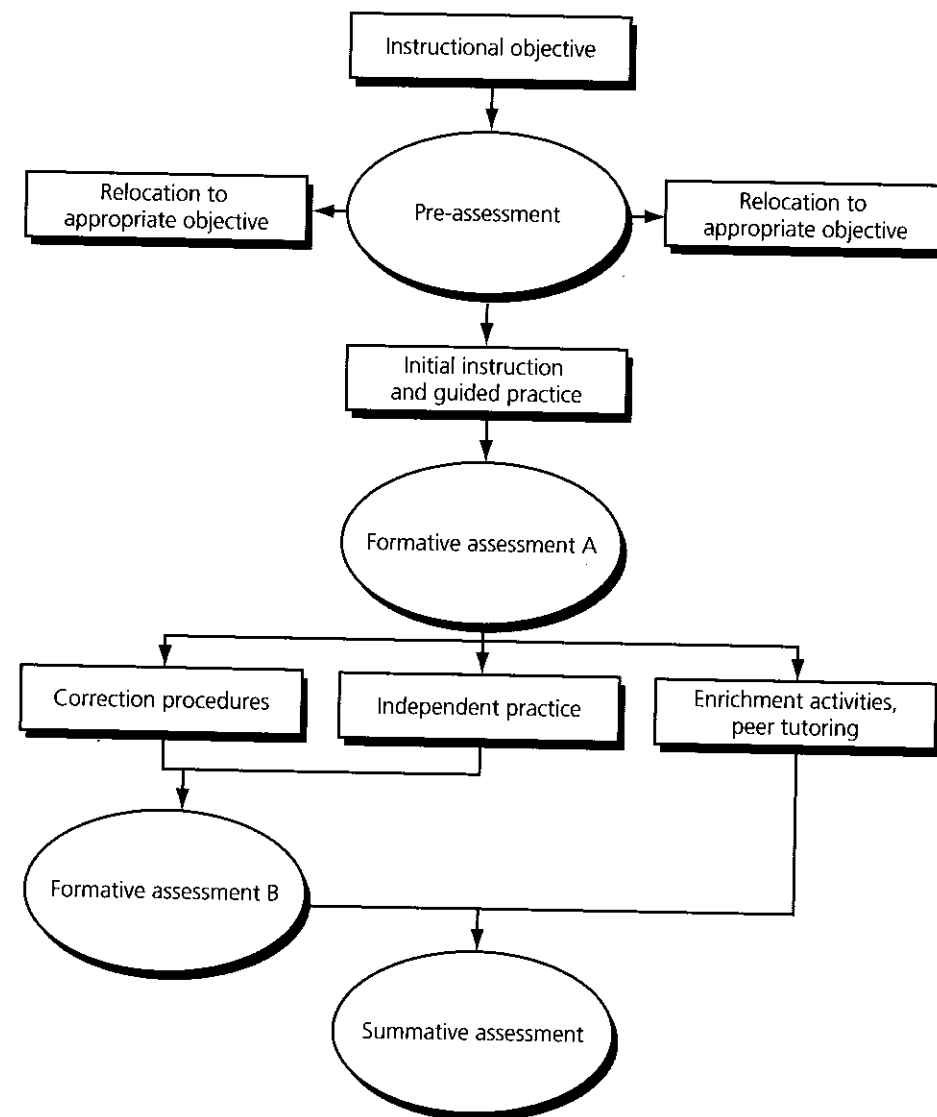
### Instruction

At this point quality *instruction* is necessary, including clear explanations, guided practice, prompts, reinforcement for individual effort, and corrective feedback.

### Formative assessment A

The term *formative assessment* refers to assessment carried out during instruction. The primary aim is to improve student learning by identifying any common errors students may be making and to determine if they are making sufficient progress. *Formative assessment* materials consist of further examples similar to those used in pre-assessment. Note that assessment is related to the skills or knowledge being taught in the classroom at the time. As indicated in Figure 5.2, three possible avenues can be followed at this point. First, students who have demonstrated progress but not mastery in learning the task may need further independent practice to gain the required fluency and accuracy. Computer programs directed at the specific skill level can be ideal for providing independent practice. Second, students who have reached mastery can move to enrichment activities, such as participating in class games with an appropriate focus, or by providing peer tutoring for students in other groups. Third, correction procedures can be used for students who have not demonstrated mastery and for whom the assessment process has highlighted errors in learning.

FIGURE 5.2 THE MASTERY-LEARNING PROCESS



Adapted from Torshen (1977).

### Correction procedures

Correctives may be in the form of alternative materials, for example, additional guided practice with concrete examples. It is important that feedback provided to students who need further assistance with learning is immediate, specific and related to the task. Such correction must give students the time they require to master learning individually. Examples of *correction procedures* include flashcards, concrete materials, games, relevant computer programs and working with a peer tutor. The focus at this point is on deficits in the teaching process – not on deficits in the

student. Errors are considered a normal part of the learning process so that students learn to make adjustments and not fear failure.

### Formative assessment B

The second *formative assessment* provides a further opportunity to assess the level of mastery in students who have had to complete corrective programs. Students may be identified as requiring additional learning opportunities or may be redirected to learning objectives at an alternative level. Instructional decisions and changes to programs should be based on the outcomes of formative assessments. Given the time and opportunity to learn, most students will be able to proceed through levels of skill development in a unit of work.

### Summative assessment

*Summative assessment* is used primarily at the completion of a unit of work. It is concerned with a comprehensive evaluation of all learning outcomes, for example, the topics or objectives covered over a five-week period. Where students have reached mastery and maintained skills, this should be indicated. A few students may not have reached the required level of mastery to maintain skills over time, which indicates that specific areas need revision on an individual or group basis.

### Cooperative learning

A strong research base supports *cooperative learning* as an organisational strategy for teaching social skills and responsibility, while at the same time focusing on academic content (Goodwin, 1999; Jenkins et al., 2003; Johnson & Johnson, 2003). Students operating within a cooperative-learning classroom are typically absorbed in an activity as they work together in small groups towards achieving a common goal. While the focus may appear to be on a set topic (such as 'The life of a European wasp'), there is usually a specific focus on a stated social skill (for example, 'one person speaks at a time') and on developing the competencies required for effective group operations through designated roles – such as reporter, recorder, leader, clarifier and encourager. Cooperative learning addresses specific academic content, as well as the development of social skills and an increasing understanding of the roles people fulfil when they work cooperatively to achieve a common end.

A further noticeable feature of the cooperative-learning classroom is the amount of student control there is over the learning process. The teacher maintains a guiding, facilitative and empowering role in order to allow students to share the responsibility of learning (Gillies & Boyle, 2005). The teacher's role is none the less important. It is significant in maintaining a focus on the academic and social purposes of the lesson, and in monitoring individual students carefully as they progress towards achieving set goals within the group activities (Yamanashi, 2005). A necessary feature of cooperative-learning activities is that they include group goals and individual accountability.

Cooperative learning provides an effective follow-up strategy to whole-class instruction, with students working cooperatively in small heterogeneous groups. Students who have an

understanding of the targeted concepts can provide explanations for peers who might be experiencing difficulties. Peer explanations are often at a level of elaboration that students can relate to and are usually based on the processes that the individual explaining the topic has used to develop his or her own understanding (Gillies & Ashman, 2000). The quality of interaction in small groups can be enhanced when students are provided with specific training in strategies that help learning, such as how to ask questions, give feedback, check for errors and give explanations at a level that supports increased understanding (Brophy, 1998; Good & Brophy, 2000).

Children vary in their initial ability to participate in cooperative-learning processes, so it is necessary for the skills of cooperation to be taught and practised, with frequent regular feedback provided on the appropriate use of targeted skills. These skills include effective communication, building and maintaining trust, providing leadership, and managing conflicts (Goodwin, 1999). The teacher and students need to have clear expectations about the procedures to be followed during the cooperative-learning activities, with careful monitoring required to ensure that students remain focused on the task (Brophy, 1998). The following discussion outlines the common steps required to establish cooperative-learning processes in the classroom. (It is important to note that there is a vast literature relating to the different permutations of cooperative learning developed for use in various settings, some of which are included in the readings at the end of this chapter.)

### Focus on group cohesiveness

Many simple activities are recommended to assist students to develop positive attitudes towards one another. Box 5.3 features an activity that aids in developing group cohesiveness.

### Developing social skills

A focus on social-skills development helps students to identify those behaviours that are acceptable in a group situation and those that are not acceptable (Gillies & Ashman, 2000). Hill and Hill (1990, p. 39) recommend a process for getting students to describe what the skill 'looks like' and 'sounds like' (see Box 5.4). This allows students to describe the skill in their own words and explicitly teach the skill within the context of an interactive group activity. Again, as indicated earlier in this chapter, students need the opportunity for guided practice of a specific skill, and then independent practice within the context of a group activity.

### Introducing individual roles

Individual students need to develop the skills required for efficient functioning within the group. Again, these skills need to be introduced and taught explicitly through modelling, practice and positive reinforcement. Students learn that groups function best if each person has a defined role, such as leader, encourager, time-keeper and reporter (see Table 5.2). The type and number of roles varies according to group size, and students need to have the opportunity to develop a range of roles.

Table 5.2 lists some of the more common roles found in group activities. As students build up competence in these activities, the responsibility for group functioning becomes less that of the teacher and more that of the group working together. Students also need to discuss roles that disrupt group processes, such as the boss, show-off and criticiser.

### BOX 5.3

#### ACTIVITY DESIGNED TO DEVELOP COHESIVENESS IN A GROUP OF STUDENTS

The class sits in a circle. One person holds a pair of glasses (these can be an enlarged cardboard cut-out or a party mask) to his or her face, and turns to face the next person, saying:

'Glasses, glasses, what do you see:

What is the nicest thing you see about me?'

The glasses are handed to the next person, who states two or three things that are positive about his or her partner. The new person holding the glasses then turns to the person on the other side and repeats the process.

Source: Barwick, Dawson, Bramble & Worland (1992).

### BOX 5.4

#### SKILL: TAKING TURNS

The class forms a circle with two children sitting in the centre. The two children in the middle of the circle talk about a topic of interest, for example, their pets. As they talk, the other students in the class observe the activity.

The whole group then discusses what is important in taking turns by describing what turn-taking 'looks like' and 'sounds like'.

From the list developed, it is possible to identify one component as a focus for a class cooperative-learning activity, for example, eye contact, one person talking at a time, smiles, nodding, listening, or asking questions.

Source: Adapted from Hill and Hill (1990, p. 39).

### Types of cooperative-learning models

The following models are just some of the many that have been described to guide the development of cooperative-learning processes in the classroom.

#### Think-pair-share

This is a simple activity involving two people, so it is ideal for getting started. The pair is provided with a question to answer, for example: 'What would happen if you found a Scratchie ticket?' The students think of an answer individually and are asked to share their response with their partner. The pair then decides on one answer to share with the rest of the class (Davidson & O'Leary, 1990).

#### Co-op co-op

In this activity the task is broken into smaller sections so that each member of the group is responsible for completing a section. The group members then combine their efforts for presenting to the whole class. For example, if completing a project on the platypus, the tasks can be

TABLE 5.2 ROLES THAT ASSIST GROUPS TO WORK COOPERATIVELY

TITLE	ROLE
Recorder	Records the group's discussion and decisions.
Facilitator	Helps the group to stay on task and encourages participation.
Monitor	Keeps track of the group's progress and time.
Reporter	Reports the group's findings and conclusions to the class.
Summariser	Summarises the group's discussion and decisions.
Timekeeper	Keeps track of the group's time and ensures that the group stays on task.
Encourager	Encourages group members to participate and share their ideas.
Clarifier	Clarifies the group's discussion and decisions.
Reflector	Reflects on the group's process and provides feedback.
Observer	Observes the group's process and provides feedback.

Source: Adapted from Barwick et al. (1992).

divided into writing information, collecting pictures, making the headings and doing illustrations (Davidson & O'Leary, 1990).

*Jigsaw*

This model centres on developing individual expert roles based on a group topic. The process consists of dividing a task into sections, with one person in each home group given a task or topic on which to become an expert. These experts then meet according to their selected area and assist each other in the exploration of that aspect. The experts return to their home group and teach the other members about the area for which they were responsible (Aronson, Stephen, Lides, Blaney & Snapp, 1978).

*The Johnson model*

This model provides a framework for teaching the processes involved in effective group participation and the academic content. A topic is introduced to the group and a time frame given for its completion. A specific social skill is identified as the focus of the activity, and students select roles within their group. The teacher's role is to monitor progress and provide feedback as groups work towards achieving academic and social goals. Evaluation is based on the set goals identified at the start of the lesson, and further goals are identified for future cooperative-learning activities (Johnson & Johnson, 1984, 2003).

*Bringing it all together*

Cooperative skills include communication, leadership, trust and conflict resolution (Goodwin, 1999). Students can explore the many subskills that are needed within these areas as people work

BOX 5.5

BRINGING IT ALL TOGETHER

Tom, a boy in Year 4, comes to school one morning with news that a European wasp's nest has been found in the ceiling of his home.

The class is first asked to find out what they can about the wasp for homework. This provides a basis for general discussion about the dangers associated with the wasp, especially for Tom and his family.

Students are arranged into groups of four to solve the problem of the wasp for Tom. The teacher prepares groups by explaining the following process:

- Identify the problem.
- List all possible solutions.
- Decide on one solution and give reasons for your decision.

Each student is given a role to perform in the process such as recorder, clarifier and so on. These roles have been introduced previously and practised. The teacher reminds the class that the social rule to practise at this time is taking turns. This skill has also been introduced previously.

While the children work on solving this real and relevant problem, the teacher moves about the class free to observe students as they interact with the lesson content, the process of problem solving, and the social skill of taking turns. The teacher provides feedback to individuals during the learning process, in addition to feedback to the group at the activity's conclusion.

together and participate in cooperative games and activities. Box 5.5 is provided to show how academic and social skills can be integrated into one activity. The lesson in this example is based on teaching students the process of group problem solving, which consists of identifying the problem, listing ideas to overcome the problem and deciding on one solution.

The potential outcomes of cooperative-learning approaches to instruction are very positive with regard to students' engagement with, active participation in and responsibility for learning. This teaching and learning process provides students with the opportunity to discuss and share information and ideas within an accepting and supportive climate. This in turn assists students to acquire and retain information, and promotes intrinsic motivation to continue the learning process. Individuals feel valued in situations that encourage and recognise their contributions. Students also develop an increased acceptance of differences within their class group and work to help and support each other.

Peer-oriented and peer-mediated strategies

Peer-oriented strategies have developed as a means to further integrate aspects of mastery learning and the development of effective social relationships with peers. These strategies utilise social interaction in some form (highly structured or less structured) as a vehicle for teaching and learning (Topping, 2005). Utley, Mortweet and Greenwood (1997) have described a range of

peer-mediated approaches, including peer networking, modelling and peer monitoring, that have particular relevance and applicability to the promotion of positive social and academic behaviour. The most commonly used strategy is peer tutoring. Peer tutoring usually involves one-to-one instruction (same-age or cross-age), with one student helping another student in order to meet individual students' learning needs and to enhance the development of positive self-concept (Spencer, Scruggs & Mastropieri, 2003).

Ideally, there are academic and social benefits for both tutors and tutees in peer-oriented or mediated strategies (Bolich, 2001; Cole & Chan, 1994). Tutors have reported understanding the concepts they teach at a deeper level as a result of the instruction process (Udvari-Solner & Thousand, 1996). Benefits for the tutees include increased engaged time in academic tasks, opportunities for practice to develop fluency in basic skills, frequent feedback on their performance and an increased rate of correct responses (Keel et al., 1999; King-Sears & Cummings, 1996). Social benefits include opportunities to learn and practise specific interaction skills, as well as enhanced confidence and improved language skills (Bolich, 2001).

Peer-oriented strategies lend themselves to integration with the mastery-learning and cooperative-learning methodologies and allow the teacher to implement the critical instructional features discussed earlier in this chapter. In addition, peer involvement is important when a specific social skills program is being introduced, as peers form the natural context within which the targeted skills are to be used.

Peer-oriented strategies include peer-influence strategies, peer-mediated strategies and peer tutors/instructors (Greenwood, Carta & Vance Hall, 1988; Utley et al., 1997), all of which we now discuss.

### Peer-influence strategies

*Peer-influence strategies* include those situations where children work together towards achieving a common goal or reward. Such situations would typically be found in the cooperative-learning activities described in the previous section. This type of peer approach allows the development of a particular set of social behaviours that are required when a group of people work towards a common goal (Greenwood et al., 1988). The types of skills developed (discussed earlier in this chapter) include encouragement, prompting, assisting others and individual responsibility for completing a section of a larger task, as in the Jigsaw model.

### Peer-mediated strategies

*Peer-mediated strategies* are directed specifically at delivering elements of an instructional-behaviour support program through peers who are trained for this purpose (Greenwood et al., 1988; Utley et al., 1997). The teacher's role is to design the program, to train the peer mediator in the aspects of the program he or she is to deliver, and to monitor the ongoing interactions between the peer mediator and target student over time. This may include training students to understand conflict, confidentiality, effective communication, listening and the mediation process. Peer mediation, as one example of a direct peer-mediated approach to instruction, has been found to be successful in preventing or reducing the use of more aversive disciplinary measures (Daunic et al., 2000).

### Peer tutors/instructors

In this strategy an individual student (tutor) is trained to deliver specific training on a task (usually with an academic focus), to another student or group of students (tutee/s). This strategy can be of benefit when one student has a better grasp of a particular topic and can assist the tutee to understand and complete the task.

Peer tutors can be of a similar age or, in the case of cross-age tutors, an older student may tutor a younger student. The tutor may be responsible for the presentation of materials, prompts and guided-practice trials. The tutor is available to provide error correction and assistance as needed by the learner. Students involved in this strategy participate jointly in the mastery of set tasks, and have a high level of engagement and acceptance of the responsibility of managing the learning situation (Damon & Phelps, 1989; Walberg, 1990). This form of peer-oriented strategy is therefore most appropriate for use in combination with mastery-learning instructional processes – particularly for students who have difficulty attending to tasks and who need additional guided practice and reteaching (Keel et al., 1999).

Longwill and Kleinert (1998) reported on a high school peer tutoring program that had a significant impact on the development of educational outcomes for students with and without disabilities. Peer tutors were required to learn about issues of concern to people with a disability while they were supporting students with disabilities on joint projects. The project resulted in the development of genuine friendships and deeper understanding of the issues of social justice and human relationships.

Careful consideration needs to be given when establishing a peer tutoring program. Tutors need to be trained in delivering specific strategies such as methods of providing prompts as a child reads, the nature of error correction procedures, and the importance of positive and immediate feedback. Part of the teacher's role is to ensure that tutors are suitable and trained, and that monitoring of tutee performance is maintained to ensure student progress in the learning situation. The following steps, adapted from Cole and Chan (1994, p. 273), are a guide to establishing a peer tutoring program:

- Develop a program appropriate to the tutee's needs.
- Set explicit learning objectives, and design materials and tutoring procedures as needed.
- Ensure that the tutor is an appropriate match for the tutee.
- Instigate a short training program for the tutor.
- Monitor the progress of tutoring.
- Provide feedback to the tutor that is encouraging and practical.
- Change tutors if necessary to ensure tutee progress.

### Summary: Integrated approaches encouraging academic learning and social adjustment

We have looked at mastery learning, cooperative learning and peer-oriented instructional methods that address the individual student's need for active and meaningful learning, and that promote a positive approach to classroom management. The three strategies address student learning, motivation, self-esteem and the development of social abilities.

The strength of mastery learning can be seen in the development of academic skills, in the growth of a positive concept of the self as able to learn, and the opportunity to provide direct and meaningful instruction at the time the student will most benefit from it.

The strength of cooperative learning lies in the development of cohesiveness in students as they acquire an understanding of the range of social skills needed to work together, the benefits of such joint efforts, and the results achieved.

Peer-oriented and mediated approaches provide a means to integrate the positive features of both mastery and cooperative learning, with benefits to the tutor and the tutee in terms of increased academic engagement, the development of positive self-concept and the promotion of positive social relationships.

No single method is intended or recommended as a complete approach to managing instruction. It is important to recognise the benefits and limits of each approach and to maximise the potential contribution of each according to the demands of the teaching-learning situation. Each strategy provides the opportunity to integrate the critical instructional variables mentioned earlier in this chapter.

## Summary

This chapter has added to our review of the large body of research on teacher effectiveness that underscores a preventative approach to managing classroom problems through the promotion of positive behaviour. In this chapter we have focused specifically on the teacher's skills in presenting instructional materials, based on the requirements of curriculum and desired outcomes, with a focus on meeting the diverse needs of students within today's classrooms. In discussing curriculum we have highlighted the value of developmentally appropriate materials in relation to social development, the need for relevant and achievable tasks, and the importance of students receiving constant feedback indicating that they are valued and successful. We have defined curriculum to include all aspects of learning offered by a school and classroom.

We have discussed the importance of students perceiving themselves as successful learners, in terms of learning goals, self-efficacy and the development of motivation to learn. Learning has been defined as a dynamic process that enables successful performance of skills and demonstration of knowledge and attitudes.

The role of the teacher in managing the instructional setting has been highlighted in terms of the many instructional factors found necessary to enhance student learning opportunities, relative to identified stages of learning. A focus on Quality Teaching in today's schools was explored as a means of understanding how important the professional teacher is in the larger educational world.

Curriculum, student learning and instruction all interact to impact on the development of a positive classroom climate. Mastery learning, cooperative learning and peer-oriented and mediated strategies have been discussed in this chapter as possible methods for managing the learning environment and maximising student learning outcomes.

The overall focus of this chapter has been the integration of approaches to managing student learning so that attention is given to academic learning, social interaction and the promotion of

positive behaviour. Chapter 6 describes procedures for establishing the classroom setting necessary for instructional variables to be addressed in an orderly and productive manner, providing a necessary bridge to the integration of social and academic learning and establishing a positive classroom climate.

## Key concepts

- acquisition
- behaviour
- cooperative learning
- curriculum
- feedback
- fluency
- generalisation
- instruction
- learning
- learning strategies
- maintenance
- mastery learning
- motivation
- peer-oriented strategies
- self-efficacy

## Activities

### Classroom scenario

The situation is a composite upper-primary class of 28 students. The students are seated in a U-shape around the room, with a group of tables in the centre that seats six students. These six students appear to have difficulty keeping up with the class, not only in terms of academic skills but also with regard to organising their materials, keeping bookwork up to date, understanding directions and completing tasks. Their pencils, rulers and books are kept in a disorganised array on their desks. Most of those in the group frequently need to borrow equipment such as coloured pencils and rulers.

All the students have returned to the class after the lunch break and are directed to complete a range of tasks they have been working on over the past week, including completing written tasks from the board, writing a poem and illustrating it, colouring a picture, and recording their spelling homework.

After 10 minutes the teacher announces that the noise level is too great and that the class is going to have to work on something else. The students are directed to take out the necessary book and to copy information from the board. The teacher then begins to write notes on the class board, explaining terms as she goes. The topic relates to the current class theme on reptiles, with this lesson providing information specific to snakes.

After a while the teacher needs to remove a section of writing from the board so as to add more. However, the children in the centre group have not finished copying this information from the board. They have been slow organising their books, finding a pencil and simply managing to copy from the board. The teacher tells them to get the information from other students, and that the rest of the class cannot wait for them all the time.

## ACTIVITY 5.1

Discuss the nature of the learning that is taking place in this lesson for the group of students who have difficulty keeping up, in terms of their motivation, self-efficacy and learning goals.

## ACTIVITY 5.2

With a particular group of students in mind, complete the following table, indicating how you would structure a lesson to include all relevant aspects critical to successful instruction. Alternatively, describe how the teacher in the scenario lesson could structure the lesson to include these aspects.

LESSON	CLASS
INSTRUCTIONAL OBJECTIVE	
Establishing the learning set	
<ul style="list-style-type: none"> <li>review the previous day's work</li> <li>introduce new content and state objective</li> </ul>	
Facilitating the learning process	
<ul style="list-style-type: none"> <li>use demonstration</li> <li>use guided practice</li> <li>check for student understanding</li> </ul>	
Monitoring the learning process	
<ul style="list-style-type: none"> <li>use guided practice</li> <li>use independent practice</li> <li>give feedback and correctives</li> </ul>	
Evaluating and giving feedback on the learning process	
<ul style="list-style-type: none"> <li>initiate weekly and monthly reviews</li> </ul>	

## ACTIVITY 5.3

How could this topic (or similar) be presented using a cooperative-learning approach?

## ACTIVITY 5.4

What opportunities exist in the scenario described for the teacher to use peer-oriented approaches? Compare the advantages of peer-instructional methods with teacher-dominated instructional methods in this and other situations.

## ACTIVITY 5.5

Describe a unit of work for a group of students using mastery-learning procedures.

## ACTIVITY 5.6

Conduct a search of the support documents and policies in your educational area that focus on the promotion of high-quality teaching and learning (for example, [www.det.nsw.edu.au](http://www.det.nsw.edu.au) or [www.education.qld.gov.au](http://www.education.qld.gov.au)). In light of these materials, and the concepts and strategies we have covered to date in this book, can you identify some professional development goals for your pedagogical practices?

## ACTIVITY 5.7

In small groups discuss the relative importance of each of the following statements.

- What we teach, how we teach and how our students learn are critical and related considerations in the challenge to achieve positive classroom environments.
- Teachers lead and facilitate the process of learning in the complex and diverse setting that is the classroom, with the goal of maximising student learning outcomes in a range of Key Learning Areas.
- Quality student learning produces much more than simply academic outcomes, and includes social, functional, emotional and communication skills, knowledge and values.
- The learning journey involves the attainment of skills, knowledge and values in a wide range of curriculum areas that are relevant and interesting to the student.
- Effective teachers make a huge difference in the lives of students.
- When the curriculum on offer and the teaching taking place in classrooms is high quality, the potential for student misbehaviour is reduced.

## ACTIVITY 5.8

Thinking about Mr Sawyer at the beginning of this chapter ('Starter') reflect on lessons that you have given, or observed, that have worked well, and those that have not. What do you consider to be the most consistent predictors of effective teaching and learning practices from your perspective?

## Further reading

- Algozzine, B. & Ysseldyke, J. (2003). *Tips for beginning teachers*. Longmont, CO: Sopris West.
- Ysseldyke, J. & Elliott, J. (1997). *Strategies and tactics for effective instruction*. Longmont, CO: Sopris West.